Volume contents

Rapid communication
A.P. Wolfe, J.S. Baron & R.J. Cornett: Anthropogenic nitrogen deposition induces rapid ecological changes in alpine lakes of the Colorado Front Range (USA) 1–7

G. Wansard & F. Mezquita: The response of ostracod shell chemistry to seasonal change in a Mediterranean freshwater spring environment 9–16
D.M. Livingstone & I. Hajdas: Climatically relevant periodicities in the thickness of biogenic carbonate varves in Soppensee, Switzerland (9740–6870 calendar yr BP) 17–24
E.D. Reavie & J.P. Smol: Diatom-environmental relationships in 64 alkaline southeastern Ontario (Canada) lakes: a diatom-based model for water quality reconstructions 25–42
P.E. Sauer, G.H. Miller & J.T. Overpeck: Oxygen isotope ratios of organic matter in arctic lakes as a paleoclimate proxy: field and laboratory investigations 43–64
A.F. Lotter: The palaeolimnology of Soppensee (Central Switzerland) as evidenced by diatom, pollen, and fossil-pigment analyses 65–79
M. Rieradevall & S.J. Brooks: An identification guide to subfossil Tanypodinae larvae (Insecta: Diptera: Chironomidae) based on cephalic setation 81–99
O. Heiri, A.F. Lotter & G. Lemcke: Loss on ignition as a method for estimating organic and carbonate content in sediments: reproducibility and comparability of results 101–110

Computer applications to paleolimnology
H.J.B. Birks: Maximum likelihood environmental calibration and the computer program WACALIB – a correction 111–115

J.W. Chambers & N.G. Cameron: A rod-less piston corer for lake sediments: an improved, rope-operated percussion corer 117–122
D.W. Schnurrenberger, K.R. Kelts, T.C. Johnson, L.C.K. Shane & E. Ito: National lacustrine core repository (LacCore) 123–127
Book reviews 129–131

Special issue
Lac d'Annecy, France

F. Oldfield & F. Berthier: The multi-proxy late-Pleistocene and Holocene record from the sediments of the Grand Lac d'Annecy, eastern France 133–135
G. Nicoud & F. Manalt: The lacustrine depression at Annecy (France), geological setting and Quaternary evolution 137–147
C. Beck, P. Van Rensbergen, M. De Batist, F. Berthier, S. Lallier & F. Manalt: The Late Quaternary sedimentary infill of Lake Annecy (northwestern Alps): an overview from two seismic-reflection surveys 149–161
A. Brauer & J. Casanova: Chronology and depositional processes of the laminated sediment record from Lac d'Annecy, French Alps 163–177
F. Manalt, C. Beck, J.-R. Disnar, J.-F. Deconinck & P. Recourt: Evolution of clay mineral assemblages and organic matter in the Late glacial-Holocene sedimentary infill of Lake Annecy (northwestern Alps): paleoenvironmental implications 179–192
Y. Hu, F. Oldfield, F. Manalt & C. Beck: The environmental significance of magnetic measurements of Late Pleistocene and Holocene sediments from the Grand Lac d'Annecy, eastern France 193–203

J.-L. Loizeau, D. Span, V. Coppee & J. Dominik: Evolution of the trophic state of Lake Annecy (eastern France) since the last glaciation as indicated by iron, manganese and phosphorus speciation 205–214
M. Magny, A. Marguet, G. Chassepot, H. Richard & Y. Billaud: Early and late Holocene water-level fluctuations of Lake Annecy, France: sediment and pollen evidence and climatic implications 215–227
H. Noël, E. Garbolino, A. Brauer, E. Lallier-Vergès, J.-L. de Beaulieu & J.-R. Disnar: Human impact and soil erosion during the last 5000 yrs as recorded in lacustrine sedimentary organic matter at Lac d'Annecy, the French Alps 229–244
J.A. Dearing, Y. Hu, P. Doody, P.A. James & A. Brauer: Preliminary reconstruction of sediment-source linkages for the past 6000 yrs at the Petit Lac d'Annecy, France, based on mineral magnetic data 245–258
F. David, G. Farjanel & M.P. Jolly: Palyno- and chronostratigraphy of a long sequence from Lac d'Annecy (northern outer Alps, France) 259–269
K. Kashiwaya, H. Sakai, M. Ryugo, M. Horii & T. Kawai: Long-term climato-limnological cycles found in a 3.5-million-year continental record 271–278
F. Sylvestre, S. Servant-Vildary & M. Roux: Diatom-based ionic concentration and salinity models from the south Bolivian Altiplano (15–23°S) 279–295
D. Verschuren: Reconstructing fluctuations of a shallow East African lake during the past 1800 yrs from sediment stratigraphy in a submerged crater basin 297–311
J. Yang, P.F. Karrow & G.L. Mackie: Paleoecological analysis of molluscan assemblages in two marl deposits in the Waterloo region, southwestern Ontario, Canada 313–328
A. Nesje, S.O. Dahl, J.A. Matthews & M.S. Berrisford: A ~4500-yr record of river floods obtained from a sediment core in Lake Atnsjøen, eastern Norway 329–342
M. Leng, P. Barker, P. Greenwood, N. Roberts & J. Reed: Oxygen isotope analysis of diatom silica and authigenic calcite from Lake Pinarbasi, Turkey 343–349
D.R. Francis: A record of hypolimnetic oxygen conditions in a temperate multi-depression lake from chemical evidence and chironomid remains 351–365
H. Leppänen & A. Oikari: Retene and resin acid concentrations in sediment profiles of a lake recovering from exposure to pulp mill effluents 367–374
P.E. Noon, H.J.B. Birks, V.J. Jones & J.C. Ellis-Evans: Quantitative models for reconstructing catchment ice-extent using physical-chemical characteristics of lake sediments 375–392

Comment
E.F. Stoermer: Diatom taxonomy for paleolimnologists 393–398

Computer Applications to Paleolimnology
S. Wunsam & J.C. Bowman: Economical digital photomicroscopy 399–403

Book reviews 405–409

W. Hofmann: Late-Glacial/Holocene succession of the chironomid and cladoceran fauna of the Soppensee (Central Switzerland) 411–420
M.-L. Brännvall, R. Bindler, O. Emteryd & I. Renberg: Four thousand years of atmospheric lead pollution in northern Europe: a summary from Swedish lake sediments 421–435
J.G. Kim & E. Rejmánková: The paleoecological record of human disturbance in wetlands of the Lake Tahoe Basin 437–454
G. Benoit & T.F. Rozan: ^{210}Pb and ^{137}Cs dating methods in lakes: a retrospective study 455–465
B.P. Ilyashuk & E.A. Ilyashuk: Response of alpine chironomid communities (Lake Chuna, Kola Peninsula, northwestern Russia) to atmospheric contamination 467–475

A. Bomblies, D.M. McKnight & E.D. Andrews: Retrospective simulation of lake-level rise in Lake Bonney based on recent 21-yr record: indication of recent climate change in the McMurdo Dry Valleys, Antarctica 477–492
C.E. Carter: On the use of instar information in the analysis of subfossil chironomid data 493–501
J.J. Moore, K.A. Hughen, G.H. Miller & J.T. Overpeck: Little Ice Age recorded in summer temperature reconstruction from varved sediments of Donard Lake, Baffin Island, Canada 503–517
G.W. Berger & P.T. Doran: Luminescence-dating zeroing tests in Lake Hoare, Taylor Valley, Antarctica 519–529
J.Q. Christensen & S. Björck: Digital sediment colour analysis, DSCA, of lake sediments – pitfalls and potentials 531–538
R.A. Knapp, J.A. Garton & O. Sarnelle: The use of egg shells to infer the historical presence of copepods in alpine lakes 539–543
Book reviews 545–550
Volume contents 551–553
Author index 554